LISTING OF CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A modified viral particle comprising at least a partially delipidated viral particle, wherein the partially delipidated viral particle:

initiates a positive immune response in an animal or human patient; and,

incites protection against an infectious organism.

2. (Original) The modified viral particle of claim 1 wherein the modified viral particle is immunodeficiency virus, hepatitis or pestivirus.

3. (Original) A method for creating a modified viral particle comprising the steps of:

receiving a plurality of viral particles, each having a viral envelope, in a fluid;

exposing the viral particles to a delipidation process; and,

partially delipidating the viral particles wherein the delipidation process at least partially removes the viral envelopes to create the modified viral particle and wherein the modified viral particle is capable of provoking a positive immune response in a patient.

4. (Original) The modified viral particle of claim 3 wherein the viral particle is immunodeficiency virus, hepatitis or pestivirus.

5. (Original) A method for creating an antigen delivery vehicle comprising the steps of:

receiving a plurality of viral particles, each having a viral envelope, in a fluid;

exposing the viral particles to a delipidation process; and,

partially delipidating the viral particles to create modified viral particles that act as antigen delivery vehicles, wherein the delipidation process at least partially removes the viral envelopes to expose at least one antigen and wherein the at least one antigen is capable of provoking a positive immune response in a patient.

6. (Original) The antigen delivery vehicle of claim 5 wherein the modified viral particle comprises patient specific antigens.

7. (Original) A modified viral particle comprising at least a partially delipidated viral particle, wherein the partially delipidated viral particle is produced by exposing a non-delipidated viral particle to a delipidation process and wherein the partially delipidated viral particle comprises at least one exposed patient specific antigen that was not exposed in the non-delipidated viral particle.

8. (Original) A vaccine composition, comprising at least a partially delipidated viral particle having patient-specific antigens and a pharmaceutically acceptable carrier, wherein the partially delipidated viral particle is capable of provoking a positive immune response when administered to a patient.

9. (Original) A method of providing protection in an animal or a human against an infectious viral particle comprising the step of:

administering to the animal or the human an effective amount of a composition comprising a modified viral particle, wherein the modification comprises at least partial removal of a lipid envelope of the infectious viral particle, and a pharmaceutically acceptable carrier, wherein the amount is effective to provide a protective effect against infection by the infectious viral particle in the animal or the human.

10. (Original) The method of claim 9 wherein the protection is via an autologous process.

11. (Original) A method for provoking a positive immune response in an animal or human having a plurality of lipid-containing viral particles comprising the steps of:

obtaining a fluid containing the lipid-containing viral particles from the animal or the human;

contacting the fluid containing the lipid-containing viral particles with a first organic solvent capable of extracting lipid from the lipid-containing viral particles;

mixing the fluid and the first organic solvent;

permitting organic and aqueous phases to separate;

collecting the aqueous phase containing modified viral particles with reduced lipid content; and

introducing the aqueous phase containing the modified viral particles with reduced lipid content into the animal or the human wherein the modified viral particles with reduced lipid content provoke a positive immune response in the animal or the human.

12. (Original) The method of claim 11, further comprising:

contacting the aqueous phase with a de-emulsifying agent capable of removing the first organic solvent; and,

separating the de-emulsifying agent containing the removed first organic solvent from the contacted aqueous phase.

13. (Original) The method of claim 11, wherein after the aqueous phase is collected, the aqueous phase is contacted with a de-emulsifying agent capable of removing the first organic solvent, and the de-emulsifying agent containing the removed first organic solvent is removed from the aqueous phase before introducing the aqueous phase containing the modified viral particles with reduced lipid content into the animal or the human.

14. (Original) A method for treating a viral infection in an animal or human patient comprising:

removing blood containing a plurality of lipid-containing infectious viral particles from the animal or the human;

obtaining plasma from the blood, the plasma containing the lipid-containing infectious viral particles;

contacting the plasma containing the lipid-containing infectious viral particles with a first organic solvent capable of extracting lipid from the lipid-containing infectious viral particles to produce modified viral particles having reduced lipid content;

mixing the plasma and the first organic solvent;

permitting organic and aqueous phases to separate;

collecting the aqueous phase containing the modified viral particles; and

introducing the aqueous phase containing the modified viral particles into the animal or the human wherein the modified viral particles have at least one exposed patient-specific antigen that was not exposed in the plurality of lipid-containing infectious viral particles.

15. (Original) The method of claim 14, wherein after the aqueous phase is collected, the aqueous phase is contacted with a de-emulsifying agent capable of removing the first organic solvent, and the de-emulsifying agent containing the removed first organic solvent from the contacted aqueous phase is separated and removed before introducing the aqueous phase containing the modified viral particles into the animal or the human.

16. (Original) The method of claim 14, further comprising adding cells to the aqueous phase containing the modified viral particles before introduction into the animal or the human.

17. (Original) The method of claim 15, further comprising adding cells to the aqueous phase containing the modified viral particles before introduction into the animal or the human.

18. (Original) A method for making a vaccine comprising:

contacting a lipid-containing viral particle in a fluid with a first organic solvent capable of extracting lipid from the lipid-containing viral particle;

mixing the fluid and the first organic solvent for a time sufficient to extract lipid from the lipid-containing viral particle;

permitting organic and aqueous phases to separate; and

collecting the aqueous phase containing a modified viral particle with reduced lipid content wherein the modified viral particle is capable of provoking a positive immune response when administered to a patient.

19. (Original) The method of claim 18, further comprising:

contacting the aqueous phase with a de-emulsifying agent capable of removing the first organic solvent; and,

separating the de-emulsifying agent and the removed first organic solvent from the contacted aqueous phase.

20. (Original) A method of providing protection in an animal or a human against a viral infection comprising the step of administering to the animal or the human of an effective amount of a composition comprising the modified viral particles with reduced lipid content of claim 18 and a pharmaceutically acceptable

carrier, wherein the amount is effective to provide a protective effect against infection by the lipid-containing viral particle in the animal or the human.

21. (Original) The method of claim 20 further comprising administration of an immunostimulant.

22. (Original) The method of any one of claims 11 to 19, wherein the first organic solvent is an alcohol, an ether, an amine, a hydrocarbon, or a combination thereof.

23. (Original) The method of any one of claims 11 to 19, wherein the first organic solvent is an alcohol, an ether, or a combination thereof.

24. (Original) The method of claim 23 wherein the ether is C4 to C8 ether and the alcohol is a C1 to C8 alcohol.

25. (Original) The method of any one of claims 12, 13, 15, 17 or 19, wherein the de-emulsifying agent is an ether.

26. (Original) The method of any one of claims 11, 12, 13, 18 or 19, wherein the fluid is plasma, serum, peritoneal fluid, lymphatic fluid, pleural fluid, pericardial fluid, cerebrospinal fluid, or a fluid of the reproductive system.

27. (Original) The method of any one of claims 11 to 19, wherein the first organic solvent is an alcohol, an ether, an amine, a hydrocarbon, an ester, a surfactant or a combination thereof.